

REMARKS

The paragraph numbers correspond to those of the Office Action.

1. Claims 1-20 are pending and are active.
2. The Specification has been amended at page 1 to include the continuation status relative to Serial No. 09/922,484 of the parent filed August 3, 2001.

3. The Specification also has been amended at page 1 to update the status of the listed applications.

4. Claims 2, 4, 10 and 17-18 have been amended to correct the typographical errors noted by the Examiner. Therefore, the objections to these claims have been overcome. Applicants' attorney thanks the Examiner for his courtesy in noting these errors.

5.-8. Claims 1-2, 5, 9-10 and 14 are subject to a provisional obviousness-type double patenting rejection over claims 1 and 10-14 of co-pending application Serial No. 09/927,906.

The prosecution of Serial No. 09/927,906 is still under way and the claims of that application and this application have been amended. Therefore, it is requested that a final determination of the application of the obviousness-type double patenting rejection be held in abeyance until there is a final determination as to the allowability of the claims in Serial No. 09/927,906.

9.-10. Claims 2, 4, 10-14 and 18-20 are rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. This rejection is respectfully traversed. The Examiner states that claims 2, 4, 10 (claims 11-14 depending from claim 10) and 18 are "at best a software apparatus". Claims 2 and 4 are directed to a hardware apparatus having a controller and a memory and claims 10 and 18 recite the memory as an element. While all or a portion of the controller can be implemented as "software" there still must be some hardware, e.g., the controller, to operate the software. Clearly the memory of all of these claims is a hardware device, e.g., RAM. Further, all of these claims are in "means plus function" form. This is entirely proper. Therefore, the rejection seems not to be proper and should be withdrawn.

If this rejection is maintained, applicants' attorney respectfully requests that the Examiner specifically define what terms of the claims are considered to be a "software apparatus" and how the terms are applied to the rejected claims.

11.-12. Claims 3-4 and 15-20 are rejected as anticipated by Kodosky, et al., U.S. 6,608,638.

Claim 3 as amended is directed to a method for use in a wireless communication device for dynamically implementing changes for scheduling at least one hardware resource of the device. Claim 4 is the hardware implementation of claim 3 given in means plus function form. In accordance with the method, first and second lists of addresses corresponding to the hardware resources are generated. The use of these lists is subject to the receipt of a request to modify the use of a current source with links (pointers) in the various addresses. A backup capability also is provided.

These claims are basically directed to the method and apparatus implementation of the flow chart of Fig. 4C.

Kodosky is directed to a computer-implemented system and method for generating a hardware implementation of graphical code. The method may operate to configure an instrument to perform measurement functions, wherein the instrument includes a programmable hardware element.

The Kodosky method includes first creating a graphical program, in which the graphical program may implement a measurement function. A portion of the graphical program may optionally be compiled into machine code for execution by a CPU, and another portion of the graphical program may be converted into a hardware implementation on a programmable hardware element. The programmable hardware element is configured utilizing a hardware description to produce a configured hardware element. In one embodiment, the graphical program manipulates one or more hardware resources of an instrument, and an indication of usage of the one or more hardware resources are displayed during creation of the graphical program.

Kodosky does not teach or even suggest a method of operating hardware resources for a wireless communication device as required by the claimed invention of

claims 3-4. Kodosky is instead directed generally to a computer-implemented system and method for generating a hardware implementation of graphical code. This is not at all like the control of hardware resources of a wireless communication device. Clearly, Kodosky neither teaches nor suggests the novel method and apparatus of claims 3-4 in which two lists are used. Therefore, these claims are patentable and should be allowed.

Claim 15 is also directed to a method of operating a system of a wireless communication device having a plurality of hardware resources.

Claim 15 recites determining the quantity of hardware resources for the communication device, generating a list of how these resources are to be linked and receiving information of the desired quantity of resources to be operated in the device. This mitigates keeping unnecessary resources of the device active. Claim 16 depends from claim 15 and further recites that the list is for virtual resources. Claim 17, which depends from claim 15, is specific to the use of a primary table and a secondary table, the primary table used for tracking group allocation and the secondary table for mapping virtual uses. These features are clearly not disclosed or suggested in Kodosky.

Claim 18 basically is the hardware analog of claim 15. Claim 19 depends from claim 18 and further calls for the list to be of virtual resources available for a given function, while claim 20 depends from claim 18 and calls for the list, including a primary table and a secondary table, with the primary table for tracking a group allocation and the secondary table for mapping virtual uses. Kodosky does not teach or suggest the various features of claims 15-20, particularly those of the dependent claims 16-20 for which Kodosky would seem to have no need. Therefore, claims 15-20 also should be allowable.

9. Claims 1-2 and 5-14 are rejected under 35 USC 103(a) as being unpatentable over Prestifilippo et al. (US Patent No 5,446,889) in view of Kodosky.

Amended claim 1 is directed to a method for controlling hardware resources in a wireless communication device having a processor and a memory. The method includes the steps of locating a first memory address associated with a first hardware resource, transmitting control information associated with the first address to the first

hardware resource to enable its utilization, and determining a pointer associated with the first address that locates another memory address for another hardware resource. Claim 2 is an apparatus claim that basically corresponds to claim 1.

Claim 5 also is a method claim that calls for a method of operating a plurality of hardware resources in a wireless communication device in which a current address in memory is located that is associated with a current resource of the plurality of resources. Operating information is transmitted to the current resource and a pointer associated with the current resource is read that identifies another address containing operating information for another resource.

Claims 6-9 depend from claim 5 and recite further details of how the resources are used during an operating cycle of the device, including its operation in determining if the current resource is reused (claim 6); repeating steps of the process if the current resource has been used (claim 7); and determining if the use of the current resource should be terminated (claim 8). Claim 9 depends from claim 5 and recites details of the resources.

Claim 10 is an apparatus claim that parallels method claim 5. Claims 11-14 depend from claim 10 and roughly correspond to claims 6-9.

Prestifilippo is directed to methods for establishing, or reestablishing, the head of a linked list when such information has been lost or simply not provided. More specifically, the methods include the steps of retrieving an element of the list from the memory, identifying from the pointer of the retrieved element, the next subsequent stored element of the list, marking the next subsequent stored element, and repeating steps retrieval, identification, and marking steps for each stored element of the list.

Neither Prestifilippo nor Kodosky, alone or in combination, teaches or suggests a method of operating hardware resources in a wireless communication device, as required by the claimed invention. Prestifilippo is instead directed generally to a linked-list method, and Kodosky is directed generally to a computer-implemented system and method for generating a hardware implementation of graphical code. There appears to be no logical basis to combine these references in the context of operating

resources of a wireless communication device. Thus, the independent claims 1,2 5 and 10 are patentable over the applied references for at least these reasons.

Neither of these two patents teach or suggest the features of the dependent claims 6-9 and 11-14 discussed above, that are advantageous as used with a wireless communication device. This provides a further basis for the allowance of these claims.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Prompt and favorable action is requested.

Dated: September 9, 2005

Respectfully submitted,

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